

IN THE ABSTRACT:

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An administration strategy for the delivery at the intestinal mucosa of cytokines or cytokine antagonists, preferably of acid sensitive anti-inflammatory agents, for example, IL10 and/or soluble TNF receptor via the oral route. Preferably, inoculation occurs along with a suspension of recombinant *Lactococcus lactis* cells, which had been engineered to produce the respective proteins.

IN THE CLAIMS:

Please amend the claims as follows:

1. (Twice Amended) A method of treating inflammatory bowel disease in a mammal, said method comprising:

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SUB 12  
administering a medicament comprising an amount of a cytokine- or cytokine antagonist-producing genetically modified non-invasive Gram-positive bacterial strain, wherein the administration of said medicament results in reduction of intestinal mucosal inflammation by at least 50%,

wherein said cytokine or cytokine-antagonist is selected from the group consisting of IL-10, a soluble TNF receptor, a TNF antagonist, an IL-12 derived homodimer, and EBV BCRF1.

BB SUB 12  
6. (Amended) The method according to claim 1 wherein the bowel disease is Crohn's Disease.

BB SUB 12  
11. (Twice Amended) The method according to claim 1, wherein the cytokine is IL-10 and the non-invasive Gram-positive bacterial strain is a *Lactococcus* species.

BB sub 12 14. (Twice Amended) The method according to claim 11, wherein the bowel disease is Crohn's Disease.

BB sub 12 15. (Amended) The method according to claim 11 wherein the medicament is administered in combination with at least one additional therapeutic agent.

Please add the following new claim:

21. (New) A method of preventing inflammatory bowel disease in a mammal, said method comprising:

BB sub 12 administering a medicament comprising an amount of a cytokine- or cytokine antagonist-producing, genetically modified, non-invasive Gram-positive bacteria, wherein the administration of said medicament results in prevention of intestinal mucosal inflammation, and

wherein said cytokine or cytokine-antagonist is selected from the group consisting of IL-10, a soluble TNF receptor, a TNF antagonist, an IL-12 derived p40 homodimer, and EBV BCRF1.